<110> Owens,S. Michael.
Lacy, H. Marie

<120> Mouse/Human Chimeric Anti-Phencyclidine Antibody And Uses Thereof

<130> D6508

<140> USSN 10/828,782
<141> 2004-04-21

<150> USSN 60/464,190
<151> 2003-04-21

<160> 18

<210> 1
<211> 39
<212> DNA
<213> artificial sequence

<220>
<221> primer_bind
<222> 18, 22, 28, 31, 34
<223> 5' primer with a *EcoRV* site used to amplify leader region of murine IgG1;r=a/g, s=c/g, k=t/g,m=c/a.

SEQ 1

<400> 1
ggggatatcc accatggrat gsagctgkgt matsctctt 39

<210> 2
<211> 39
<212> DNA
<213> artificial sequence

<220>
<221> primer_bind
<222> 17, 26, 33
<223> 5′ primer with a *EcoRV* site used to amplify the leader region of murine IgG1; r=a/g, y=t/c, k=t/g.

<400> 2
ggggatatcc accatgract tcgggytgag ctkggtttt 39

<210> 3
<211> 38
<212> DNA
<213> artificial sequence

<220>
<221> primer_bind
<223> 5′primer with a *EcoRV* site used to amplify the leader region of murine IgG1.

<400> 3
ggggatatcc accatggctg tcttggggct gctcttct 38

<210> 4
<211> 38
<212> DNA
<213> artificial sequence

<220>
<221> primer_bind
<223> 5′ primer with a *EcoRV* site used to amplify the leader regionof murine kappa chain.

<400> 4
ggggatatcc accatggaga cagacacact cctgctat 38

<210> 5
<211> 39
<212> DNA
<213> artificial sequence

<220>
<221> primer_bind
<223> 5′ primer with a *EcoRV* site used to amplify the leader region of murine kappa chain.

<400> 5
ggggatatcc accatggatt ttcaggtgca gattttcag 39

<210> 6
<211> 40
<212> DNA
<213> artificial sequence

<220>
<221> primer_bind
<222> 17, 25, 28, 37, 38
<223> 5′ primer with a *EcoRV* site used to amplify the leader region of murine kappa chain, r=g/a, k=g/t, y=t/c.

<400> 6
ggggatatcc accatgragt cacakacyca ggtcttyrta 40

<210> 7
<211> 40
<212> DNA
<213> artificial sequence

<220>
<221> primer_bind
<222> 20, 25, 32, 34, 37, 40
<223> 5′ primer with a *EcoRV* site used to amplify the leader region of murine kappa chain;

k=g/t, w=a/t, y=t/c, r=g/a.

<400> 7
ggggatatcc accatgaggk ccccwgctca gytyctkggr 40

<210> 8
<211> 37
<212> DNA
<213> artificial sequence

<220>
<221> primer_bind
<223> 5′ primer with a *EcoRV* site used to amplify the leader region of murine kappa chain.

<400> 8
ggggatatcc accatgaagt tgcctgttag gctgttg 37

<210> 9
<211> 37
<212> DNA
<213> artificial sequence

<220>
<221> primer_bind
<223> 5′ primer with a *NheI* site used to amplify the V_L region of mAb6B5.

<400> 9

cccgctagcc accatgaagt tgcctgttag gctgttg 37

<210> 10
<211> 31
<212> DNA
<213> artificial sequence

<220>
<221> primer_bind
<223> 3' primer with a NotI site used to amplify the V_L region of mAb6B5.

<400> 10
tatagcggcc gcagttttta tttccagctt g 31

<210> 11
<211> 39
<212> DNA
<213> artificial sequence

<220>
<221> primer_bind
<223> 5' primer generated from primer with SEQ ID NO.1 and used to amplify V_H of mAb6B5; r=a (*18), s=c (*22) and g (*34), k=t (*28), m=a (*31) * position in the primer sequence.

<400> 11
ggggatatcc accatggaat gcagctgtgt aatgctctt 39

<210> 12

<211> 30

<212> DNA

<213> artificial sequence

<220>

<221> primer_bind

<223> 3′ primer with a *NheI* site used to amplify the V_H region of mAb6B5.

<400> 12

ggggctagct gaggagactg tgagagtggt 30

<210> 13

<211> 39

<212> DNA

<213> artificial sequence

<220>

<221> primer_bind

<223> 5′ primer used to amplify ch-mAb6B5, where the sequence is similar to primer with SEQ ID No. 11, except the *EcoRV* site is replaced by NheI site.

<400> 13

ggggctagcc accatggaat gcagctgtgt aatgctctt 39

<210> 14

<211> 31

<212> DNA

<213> artificial sequence

<220>

<221> primer_bind

<223> 3′ primer with a *XhoI* site used to amplify ch-mAb6B5.

<400> 14

gggctcgagt catttacccg gagacaggga g 31

<210> 15

<211> 714

<212> DNA

<213> artificial sequence

<220>

<223> Nucleotide sequence of anti-PCP ch-mAb6B5 light chain.

<400> 15

atgaagttgc ctgttaggct gttggtgctg atgttctgga ttcctgcttc 50
cagcagtgat gttttgatga cccaaactcc actctccctg cctgtcagtc 100
ttggagatca agcctccatc tcttgcagat ctagtcagac cattgtacat 150
agtaatggaa acacctattt agaatggtac ctgcagaaac caggccagtc 200
tccaaagctc ctgatctaca aagtttccaa ccgattttct ggggtcccag 250
acaggttcag tggcagtgga tcagggacag atttcacact caagatcagc 300

```
agagtggagg ctgaggatct gggagtttat tactgctttc aaggcacaca 350
tgctccgtac acgttcggag gggggaccaa gctggaaata aaaactgcgg 400
ccgcaccatc tgtcttcatc ttcccgccat ctgatgagca gttgaaatct 450
ggaactgcct ctgttgtgtg cctgctgaat aacttctatc ccagagaggc 500
caaagtacag tggaaggtgg ataacgccct ccaatcgggt aactcccagg 550
agagtgtcac agagcaggac agcaaggaca gcacctacag cctcagcagc 600
accctgacgc tgagcaaagc agactacgag aaacacaaag tctacgcctg 650
cgaagtcacc catcagggcc tgagctcgcc cgtcacaaag agcttcaaca 700
ggggagagtg ttga                                        714
```

<210> 16

<211> 237

<212> PRT

<213> artificial sequence

<220>

<223> Amino acid sequence of anti-PCP ch-mAb6B5 light chain.

<400> 16

```
Met Lys Leu Pro Val Arg Leu Leu Val Leu Met Phe Trp Ile Pro
 5                  10                  15
Ala Ser Ser Ser Asp Val Leu Met Thr Gln Thr Pro Leu Ser Leu
 20                  25                  30
Pro Val Ser Leu Gly Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser
 35                  40                  45
Gln Thr Ile Val His Ser Asn Gly Asn Thr Tyr Leu Glu Trp Tyr
 50                  55                  60
Leu Gln Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile Tyr Lys Val
 65                  70                  75
Ser Asn Arg Phe Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly
 80                  85                  90
Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu
 95                 100                 105
```

```
Asp Leu Gly Val Tyr Tyr Cys Phe Gln Gly Thr His Ala Pro Tyr
                110                 115                 120
Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Thr Ala Ala Ala
                125                 130                 135
Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser
                140                 145                 150
Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg
                155                 160                 165
Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly
                170                 175                 180
Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr
                185                 190                 195
Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu
                200                 205                 210
Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser
                215                 220                 225
Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys
                230                 235
```

<210> 17

<211> 1389

<212> DNA

<213> artificial sequence

<220>

<223> Nucleotide sequence of anti-PCP ch-mAb6B5 heavy chain.

<400> 17

```
atggaatgca gctgtgtaat gctcttcctc ctgtcaggaa ctgcaggtgt  50
cctctctgag gtccagctgc aacagtctgg acctgagttg gtgaagcctg  100
gggcttcagt gaagatgtcc tgcaaggctt ctggctacac tttcactgac  150
tactacatac actggatgaa gcagagccat ggaaagagcc ttgagtggat  200
tggatatatt tatcctaaca acggtggtaa tggctacaac cagaagttca  250
agggcaaggc cacattgact gtagacaagt cctccagcac agcctacatg  300
```

gagctccgca ccctgacatc tgaggactct gcagtctatt actgtggaag 350
atctacctgg gacgactttg actactgggg ccaaggcacc actctcacag 400
tctcctcagc tagcaccaag ggcccatcgg tcttcccccct ggcgccctgc 450
tccaggagca cctccgagag cacagcggcc ctgggctgcc tggtcaagga 500
ctacttcccc gaaccggtga cggtgtcgtg gaactcaggc gctctgacca 550
gcggcgtgca caccttccca gctgtcctac agtcctcagg actctactcc 600
ctcagcagcg tggtgaccgt gccctccagc aacttcggca cccagaccta 650
cacctgcaac gtagatcaca agcccagcaa caccaaggtg gacaagacag 700
ttgagcgcaa atgttgtgtc gagtgcccac cgtgcccagc accacctgtg 750
gcaggaccgt cagtcttcct cttcccccca aaacccaagg acaccctcat 800
gatctcccgg acccctgagg tcacgtgcgt ggtggtggac gtgagccacg 850
aagaccccga ggtccagttc aactggtacg tggacggcgt ggaggtgcat 900
aatgccaaga caaagccacg ggaggagcag ttcaacagca cgttccgtgt 950
ggtcagcgtc ctcaccgttg tgcaccagga ctggctgaac ggcaaggagt 1000
acaagtgcaa ggtctccaac aaaggcctcc cagccccat cgagaaaacc 1050
atctccaaaa ccaaagggca gccccgagaa ccacaggtgt acaccctgcc 1100
cccatcccgg gaggagatga ccaagaacca ggtcagcctg acctgcctgg 1150
tcaaaggctt ctatcccagc gacatcgccg tggagtggga gagcaatggg 1200
cagccggaga acaactacaa gaccacacct cccatgctgg actccgacgg 1250
ctccttcttc ctctacagca agctcaccgt ggacaagagc aggtggcagc 1300
aggggaacgt cttctcatgc tccgtgatgc atgaggctct gcacaaccac 1350
tacacgcaga agagcctctc cctgtctccg ggtaaatga 1389

<210> 18

<211> 462

<212> PRT

<213> artificial sequence

<220>

<223> Amino acid sequence of anti-PCP ch-mAb6B5 heavy chain.

<400> 18

Met Glu Cys Ser Cys Val Met Leu Phe Leu Leu Ser Gly Thr Ala
5 10 15

```
Gly Val Leu Ser Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu
                  20                  25                  30
Val Lys Pro Gly Ala Ser Val Lys Met Ser Cys Lys Ala Ser Gly
                  35                  40                  45
Tyr Thr Gly Thr Asp Tyr Tyr Ile His Trp Met Lys Gln Ser His
                  50                  55                  60
Gly Lys Ser Leu Glu Trp Ile Gly Tyr Ile Tyr Pro Asn Asn Gly
                  65                  70                  75
Gly Asn Gly Tyr Asn Gln Lys Phe Lys Gly Lys Ala Thr Leu Thr
                  80                  85                  90
Val Asp Lys Ser Ser Ser Thr Ala Tyr Met Glu Leu Arg Thr Leu
                  95                 100                 105
Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys Gly Arg Ser Thr Trp
                 110                 115                 120
Asp Asp Phe Asp Tyr Trp Gly Gln Gly Thr Thr Leu Thr Val Ser
                 125                 130                 135
Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys
                 140                 145                 150
Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys Leu Val
                 155                 160                 165
Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly
                 170                 175                 180
Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser
                 185                 190                 195
Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser
                 200                 205                 210
Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys Pro
                 215                 220                 225
Ser Asn Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val
                 230                 235                 240
Glu Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val
                 245                 250                 255
Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg
                 260                 265                 270
Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp
                 275                 280                 285
Pro Glu Val Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His
                 290                 295                 300
Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe
                 305                 310                 315
```

SEQ 12

```
Arg Val Val Ser Val Leu Thr Val Val His Gln Asp Trp Leu Asn
                320                 325                 330
Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Gly Leu Pro Ala
                335                 340                 345
Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys Gly Gln Pro Arg Glu
                350                 355                 360
Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys
                365                 370                 375
Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser
                380                 385                 390
Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
                395                 400                 405
Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe
                410                 415                 420
Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
                425                 430                 435
Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His
                440                 445                 450
Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
                455                 460
```